

Listing of Claims:

We claim:

1. (Currently Amended) A network backplane interface for a local network, comprising:

(a) a circuit board;

(b) a plurality of sockets connected to the circuit board for receiving plug-in network devices;

(c) unified power lines on the circuit board connected with ~~[[to]]~~ one or more sockets for powering a plug-in network device in each of the one or more ~~[[socket]]~~ sockets, the unified power lines comprising a single power line connected with all of the one or more sockets;

(d) unified communication lines on the circuit board ~~to one or more of the plurality of sockets~~ for communication with a plug-in network when placed in each socket, the unified communication lines comprising a single communication line connected with all of the plurality of sockets;

(e) a housing for the circuit board, the unified power lines and the unified communication lines, including openings for exposing ~~[[said]]~~ the plurality of sockets;

(f) a network interface for communication between the plug-in network and an external network, and

(g) a configuration circuit on the circuit board, wherein the configuration circuit is operable to receive the configuration associated with a plug-in network device from the plug-in network device and is operable to communicate with a plug-in network device in a socket to identify the plug-in network device and configure the plug-in network device, ~~and~~ the configuration circuit ~~includes~~ comprising:

~~[[an]]~~ a ~~instruction~~ memory operable to store configuration information for a plurality of predetermined plug-in network device types and to store configuration instructions for configuring one or more different plug-in network devices to perform one or more corresponding desired functions~~[[,]]~~ ; and

a configuration processor operable to execute the configuration instructions to communicate with a plug-in network device in a socket, and configure the plug-in network device based on the configuration information,

~~wherein the configuration circuit includes a configuration memory operable to store configuration information for a plurality of predetermined plug-in device types, and~~

~~the configuration circuit is operable to receive the configuration associated with a device from the device, wherein executing the configuration instructions configures the device based on the configuration information.~~

2. (Currently Amended) The backplane of claim 1, further comprising a communication controller which allows communication between the plug-in network devices.
3. (Currently Amended) The backplane of claim 1, wherein the configuration circuit is further operable to generate a user interface based on the component information, to cause display of the user interface, to receive a configuration command for the plug-in network device via the user interface, and to configure the plug-in network device based on the configuration command.
4. (Previously Presented) The backplane of claim 1, wherein the desired functions comprise a modem function, a broadband access function, firewall security protection, a router function, a hub function, a switch function, a network-attached storage function, a printer server function, or a combination thereof.
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) The backplane of claim 1, wherein the network interface comprises a multiple 100baseT Ethernet connector.

8. (Currently Amended) The backplane of claim 1, wherein the configuration circuit includes an embedded configuration module to configure plug-in network devices in a configuration session.
9. (Currently Amended) The backplane of claim 8, wherein the configuration module configures all plug-in network devices in one configuration session.
10. (Currently Amended) The backplane of claim 9, wherein the configuration module comprises a platform-independent configuration software.
11. (Currently Amended) The backplane of claim 9, wherein the configuration circuit provides a user interface for receiving user configuration commands to configure function of one or more plug-in network devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in network devices in one session.
12. (Original) The backplane of claim 1, wherein at least one socket is dedicated to connection and communication with an external network.
13. (Original) The backplane of claim 12, further including a switch for connecting a security module between said socket for external connection, and the local network.
14. (Original) The backplane of claim 13, further including a connection for bridging a security module between said socket for external connection, and the local network.
15. (Original) The backplane of claim 1, wherein a socket comprises a RJ-45 socket.
16. (Original) The backplane of claim 1, wherein a socket comprises a proprietary connector combining power and data connections.
17. (Currently Amended) A network backplane interface for a local network, comprising:
 - (a) a plurality of sockets for receiving plug-in network devices;

(b) unified power lines connected with ~~[[to]]~~ one or more sockets for powering a plug-in network device in each of the one or more ~~[[socket]]~~ sockets, the unified power lines comprising a single power line connected with all of the one or more sockets;

(c) unified communication lines ~~to each socket~~ for communication with the plug-in network devices when placed in each socket, the unified communication lines comprising a single communication line connected with all of the plurality of sockets; and

(d) a configuration module for configuration of one or more plug-in network devices, wherein the configuration module communicates with each plug-in network device in each socket to identify the plug-in network device and configure the plug-in network device for network communication

18. (Currently Amended) The backplane of claim 17, wherein the configuration module comprises:

(1) a memory for storing configuration instructions for configuring one or more different plug-in network devices~~[[,]]~~; and

(2) a configuration processor for executing the configuration instructions to communicate with a plug-in network device in a socket, and configure that plug-in network device for network communication.

19. (Currently Amended) The backplane of claim 17, wherein the configuration module includes a configuration memory having configuration information for a plurality of predetermined plug-in network device types.

20. (Currently Amended) The backplane of claim 19, wherein the configuration module includes extended configuration memory for storing configuration information for additional plug-in network device types..

21. (Currently Amended) The backplane of claim 17, wherein the configuration module allows configuring plug-in network devices in a configuration session for network communication among the plug-in network devices.

22. (Currently Amended) The backplane of claim 21, wherein the configuration module configures all plug-in network devices in one configuration session.
23. (Original) The backplane of claim 22, wherein the configuration module comprises a platform-independent configuration software.
24. (Currently Amended) The backplane of claim 22, wherein the configuration module provides a user interface for receiving user configuration commands to configure function of one or more plug-in network devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in network devices in one session.
25. (Currently Amended) A network interface module for a local network, comprising:
- (a) a circuit board having a plurality of sockets for receiving plug-in network devices;
 - (b) unified power lines on the circuit board connected with [[to]] one or more sockets for powering a plug-in network device in each of the one or more [[socket]] sockets, the unified power lines comprising a single power line connected with all of the one or more sockets
 - (c) a switch on the circuit board connected ~~to one or more~~ with each of the plurality of sockets allowing communication with the plug-in network devices when placed in one or more of the sockets; and
 - (d) a configuration module on the circuit board for functional configuration of one or more plug-in network devices when placed in one or more of the sockets, wherein the configuration module communicates with each plug-in network device in each socket to identify the plug-in network device to perform selected functions; and
 - (e) a network interface for communication between the plug-in network and an external network.
26. (Currently Amended) The network interface module of claim 25, wherein the configuration module comprises:
- (1) a memory for storing configuration instructions for configuring one or more different plug-in network devices~~[[,]]~~ ; and

(2) a configuration processor for executing the configuration instructions to communicate with a plug-in network device in a socket, and configure that plug-in network device for network communication.

27. (Currently Amended) The network interface module of claim 25, wherein the configuration module includes a configuration memory having configuration information for a plurality of predetermined plug-in network device types.

28. (Currently Amended) The network interface module of claim 27, wherein the configuration module includes extended configuration memory for storing configuration information for additional plug-in network device types.

29. (Currently Amended) The network interface module of claim 25, wherein the configuration module allows configuring plug-in network devices in a configuration session for network communication among the plug-in network devices.

30. (Currently Amended) The network interface module of claim 29, wherein the configuration module configures all plug-in network devices in one configuration session.

31. (Original) The network interface module of claim 30, wherein the configuration module comprises a platform-independent configuration software.

32. (Currently Amended) The network interface module of claim 30, wherein the configuration module provides a user interface for receiving user configuration commands to configure function of one or more plug-in network devices to perform a desired function, wherein the user interface is operable to configure the one or more plug-in network devices in one session.

33. (Previously Presented) The network interface module of claim 25 further comprising a housing for circuit board sockets, the housing including slots for exposing said sockets.

34. (Previously Presented) The network interface module of claim 33 wherein the circuit board comprises a printed circuit board.
35. (Currently Amended) The backplane of claim 8, wherein the configuration module provides a common user interface for receiving user configuration commands to configure each plug-in network device from the common user interface.
36. (Previously Presented) The backplane of claim 35 wherein the common user interface further receives user configuration commands to configure the backplane.
37. (Previously Presented) The backplane of claim 36 wherein the common user interface is platform and operating system independent, and utilizes a common communication protocol between the plug-ins and the configuration module.
38. (Previously Presented) The backplane of claim 36 wherein the common user interface comprises a graphical user interface.
39. (Currently Amended) The backplane of claim 36 wherein the configuration circuit is accessible via a web browser to configure the plug-in network devices.
40. (Currently Amended) The backplane of claim 4 wherein the configuration circuit further includes embedded configuration instructions for configuring one or more different plug-in network devices, such that the configuration circuit uses identity of each plug-in network device to obtain corresponding configuration instructions for configuring the different plug-in network devices.
41. (Currently Amended) The backplane of claim 4 wherein if a plug-in network device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized plug-in network device from a source external to the configuration circuit.

42. (Currently Amended) The backplane of claim 41 wherein if a plug-in network device is not recognized by the configuration circuit, the configuration circuit obtains configuration instructions for the unrecognized plug-in network device from a user.

43. (Currently Amended) The backplane of claim 41 wherein if a plug-in network device is not recognized by the configuration circuit, then the configuration circuit obtains configuration instructions for the unrecognized plug-in network device from the unrecognized plug-in network device itself.